Health and Recovery Services Administration
Washington State Department of Social and Health Services
September 30, 2008

AmeriChoice Statewide Chronic Care Management Project

Savings/Cost Analysis

This report presents preliminary findings from a 9-month comparison of Health and Recovery Services Administration costs of two randomly assigned groups:

1. The first was **offered** chronic care management (referred to as the "offered treatment" group) with enrollment beginning in April 2007.
2. The second was not offered chronic care management immediately, but held for one year (called the abeyance group).

Key Findings

- Of those in the offered chronic care management group (3,536 clients), 45% (1,576 clients) received at least one month of chronic care management in the 9-month post period.
- The impact of **offering** chronic care management services in the program's initial 9 months of operation is estimated to have resulted in an average $62-$64 per member per month increase in Health and Recovery Services Administration medical expenditures, less than a 4% change from baseline. The change is not statistically significant given the variability of costs within both groups.

Target Population

Clients targeted for the AmeriChoice Statewide Chronic Care Management Project were those who were a) eligible for aged/blind/disabled, categorically-needy, Medicaid-only medical benefits and not covered by another similar insurance policy, b) not receiving long-term care services from Aging and Disability Services Administration, and c) residing anywhere in Washington except King County. The top 20% of clients as identified by the ImpactPro risk score for being at risk of having future high medical expenses were selected for the pilot. Those with certain diagnoses were excluded (HIV/AIDS, hemophilia, pregnant women, those with end stage renal disease, and those receiving hospice services).

The cost-benefit analysis is limited to those targeted clients who had at least 1 month of medical coverage in both the baseline, or "pre" period, and the "post" period, when clients would receive chronic care management. In the baseline period, costs for 7,019 clients were identified - 3536 clients in the offered treatment group and 3483 in the abeyance group:

- average age was 49
- average ImpactPro risk score was 7.22
- average monthly expenditures were $1,763 in Medicaid medical expenses

Study Design and Methodology

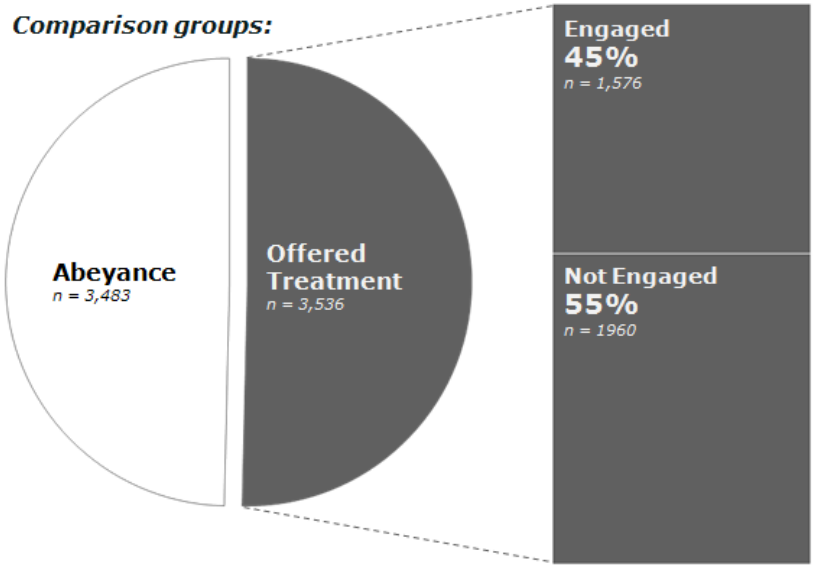
The study design used a pretest/posttest randomized control trial. The cost analysis used a proportional difference-in-differences with intent-to-treat design. This means cost savings were calculated as the proportional difference in changes in per member per month (pmpm) costs between the group randomly assigned to being offered treatment and the group randomly assigned to abeyance. The savings to cost ratio was calculated as total savings for the offered treatment group divided by the cost of providing chronic care management those who received it.

- The study was based on 9 months of experience, with a pre (baseline) period of April 1, 2006 to December 31, 2006 and post (intervention delivery) period of April 1, 2007 to December 31, 2007.
- The data source was Medicaid claims for services incurred through December 31, 2007 and paid through June 30, 2008. Certain claims-based inpatient hospital reimbursement amounts were adjusted, per usual policy, to better reflect the full cost of the inpatient stay.
- The post period per member per month figure was a weighted average, reflecting the actual number of post-period member months incurred by each client.

Results

FIGURE 1

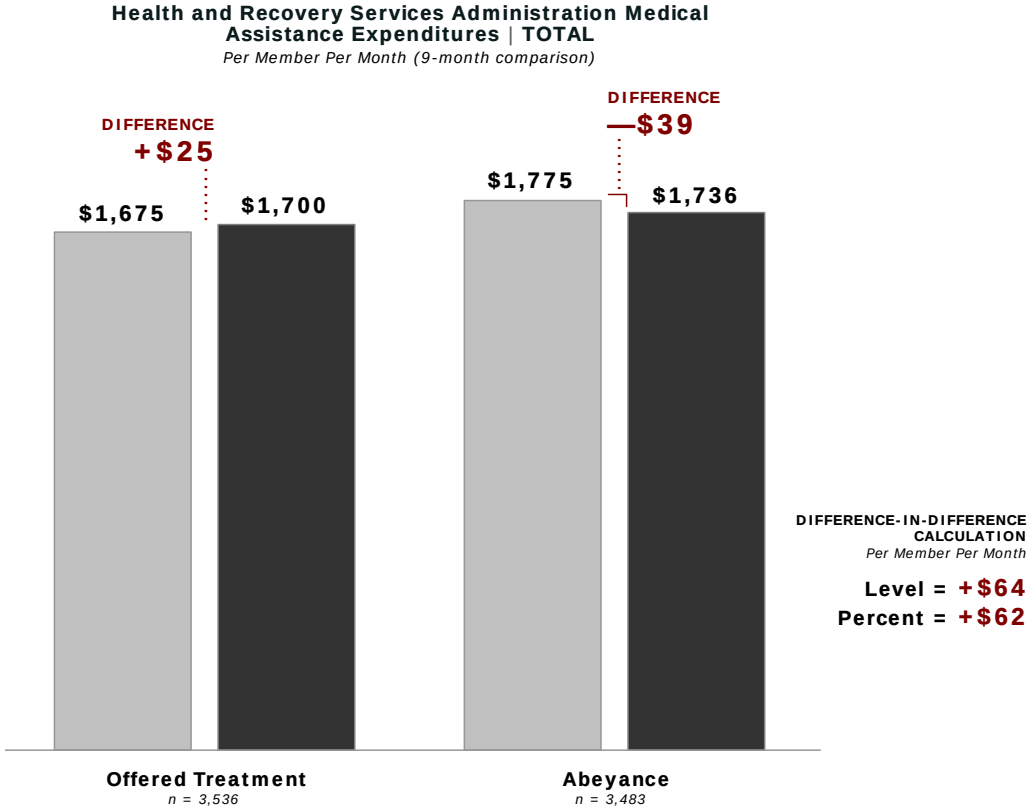
Americhoice Statewide Chronic Care Management Project Study Population



SOURCE: DSHS Planning, Performance and Accountability Administration, Research and Data Analysis Division, September 2008.

FIGURE 2

Americhoice Chronic Care Management—No medical cost savings in preliminary results



SOURCE: DSHS Planning, Performance and Accountability Administration, Research and Data Analysis Division, September 2008.

TABLE 1

Health and Recovery Services Administration (HRSA) average per member per month (pmpm) cost comparison

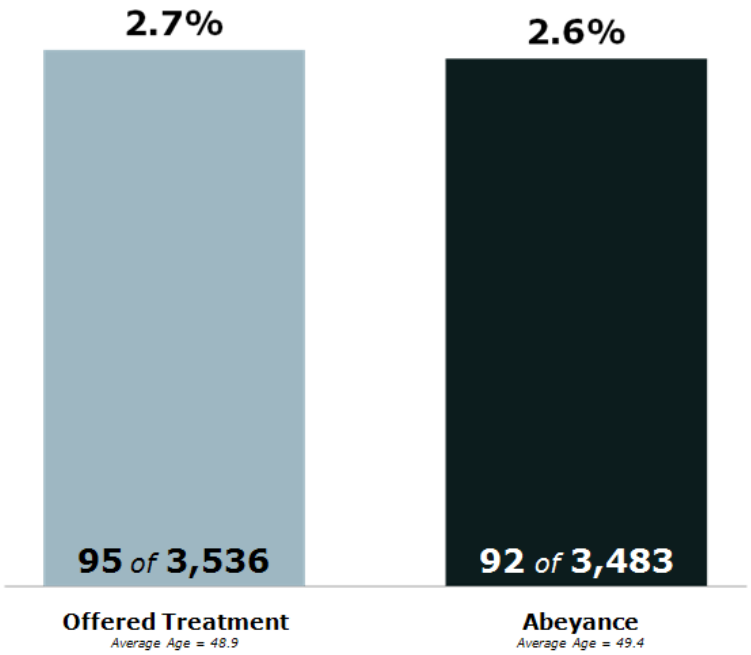
	Randomized to Offered Treatment (n=3,597)			Randomized to Abeyance (n=3,483)			Level		Percent
	Pre	Post	Dif	Pre	Post	Dif	Dif-in-Dif		Dif-in-Dif
Measure	PMPM	PMPM	PMPM	PMPM	PMPM	PMPM	PMPM	p-value	PMPM
HRSA expenditures (Total)	$1,674.74	$1,700.11	$25.37	$1,774.50	$1,735.80	-$38.70	$64.07	0.349	$61.89
Selected subset of HRSA expenditures:									
Outpatient Emergency Department (ED)	$77.78	$79.05	$1.27	$77.32	$85.38	$8.06	-$6.79	0.098	-$6.84
Inpatient (admitted through ED)	$271.20	$323.67	$52.47	$277.46	$294.92	$17.46	$35.01	0.289	$35.40
Inpatient (not admitted through ED)	$243.00	$194.14	-$48.86	$231.77	$177.48	-$54.29	$5.43	0.885	$8.06

* Calculated as the percent change in "offered treatment" minus the percent change in "abeyance", times the "offered treatment" pre period per member per month (pmpm).
Note: Statistical significance for this study is indicated by a p-value equal to or less than .05. Other values indicate the probability the difference could be caused by chance alone, given the variability in the data.

FIGURE 3

Americhoice Statewide Chronic Care mortality rate was essentially the same for the offered treatment group

Percent of clients dying in 9-month follow-up period



SOURCE: DSHS Planning, Performance and Accountability Administration, Research and Data Analysis Division, September 2008.

Discussion

The structure of the evaluation was not a test of the intervention itself, but of the policy of making chronic care management available to a high-risk population. To realize cost savings at the level of offering a service, the client participation rate needs to be fairly high and the changes in health care utilization - thus costs - of those who do participate fairly robust.

In this study:

- 45% of targeted clients were served, a modest percent of those targeted. Reasons cited for not receiving chronic care management included: inability to locate clients and unwillingness of clients to participate.

Summary

The early findings of the AmeriChoice Statewide Chronic Care Management Project points to the pilot of **offering** chronic care management not significantly changing costs to the state.

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